Method and Apparatus for Securing Electronic Data

Abstract

Techniques for securing electronic data and keeping the electronic data secured at all times are disclosed. According to one embodiment, a client module in a client machine is configured to provide access control to secured documents that may be located in a local store, another computer machine or somewhere over a data network. The client module includes a document-securing module configured to operate in a path through which a document being accessed is caused to pass so that the document can be examined or detected for the security nature. If the document is secured, the document-securing module obtains a user or group key to decrypt security information in the secured document for access rules therein. If a user accessing the document is determined to have the access privilege to the secured document, a file key is retrieved from the security information and a cipher module is activated to decrypt the encrypted data portion with the file key. Likewise, if a document is to be secured, the cipher module encrypts clear data from the document to create the encrypted data portion. The document-securing module integrates proper or desired security information with the encrypted data portion to produce the secured document.